What is claimed is:

1.   1.   A method comprising:

2   determining a timing relationship between a video window and a capture

3   raster, wherein the video window is within a display raster; and

4   adjusting a pixel clock to avert shear of the video window.

1   2.   The method of claim 1, further comprising:

2   determining that the video window is within the timing of the capture

3   raster; and

4   quickly moving image shear out of the video window.

1   3.   The method of claim 1, further comprising:

2   determining that the video window is not fully within the timing of the

3   capture raster; and

4   setting the pixel clock to cause the display raster to drift slowly.

1   4.   The method of claim 3, further comprising:

2   setting a color burst generator to phase-lock within the display raster.

1   5.   The method of claim 4, setting a color burst generator to phase-lock within

2   the display raster further comprising setting the color burst generator to a predetermined

3   nominal setting.

1   6.   The method of claim 2, quickly moving image shear out of the video

2   window further comprising:

3   determining that the video window is later than the capture raster; and

4   adjusting the pixel clock to quickly retard the display raster.

1   7.   The method of claim 6, further comprising:

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2   adjusting a color burst generator to maintain a viewable image on the

3   display raster.

1   8.   The method of claim 7, further comprising:

2   retrieving frequency error information from a table of predetermined

3   phase-locked loop parameters; and

4   calculating a color burst adjustment using the frequency error information.

1   9.   The method of claim 2, quickly moving image shear out of the video

2   window further comprising:

3   determining that the video window is earlier than the capture raster;

4   adjusting the pixel clock to quickly advance the display raster; and

5   adjusting a color burst generator to maintain a viewable image on the

6   display raster.

1   10.   The method of claim 3, setting the pixel clock to cause the display raster

2   to drift slowly further comprising:

3   determining that the pixel clock is quickly advancing the display raster;

4   and

5   setting the pixel clock to slowly advance the display raster.

1   11.   The method of claim 3, setting the pixel clock to cause the display raster

2   to drift slowly further comprising:

3   determining that the pixel clock is quickly retarding the display raster; and

4   setting the pixel clock to slowly retard the display raster.

1   12.   The method of claim 1, further comprising determining a capture raster

2   scan line number.

1   13.   The method of claim 12, further comprising determining a display raster

2   scan line number.

1   14.   The method of claim 13, further comprising:

2   determining a capture raster field polarity; and

3   determining a display raster field polarity.

1   15.   The method of claim 1, determining a timing relationship between a video

2   window and a capture raster further comprising:

3   periodically monitoring the capture raster and the display raster.

1   16.   The method of claim 15, wherein the monitoring period is not an exact

2   multiple of a field time.

1   17.   The method of claim 1, adjusting a pixel clock to avert shear of the video

2   window further comprising:

3   identifying a vertical retrace period; and

4   invoking an interrupt service routine to adjust the pixel clock.

1   18.   A method comprising:

2   determining a timing relationship between a video window and a capture

3   raster, wherein the video window is within a display raster; and

4   adjusting a pixel clock to maintain a shear-free display of the video

5   window.

1   19.   The method of claim 18, adjusting the pixel clock to maintain a shear-free

2   display of the video window further comprising:

3   determining that the timing relationship between the video window and

4   the capture raster is above a predetermined threshold; and

5   setting the pixel clock to slowly retard the display raster.

1   20.   The method of claim 18, adjusting the pixel clock to maintain a shear-free

2   display of the video window further comprising:

3   determining that the timing relationship between the video window and

4   the capture raster is below a predetermined threshold; and

5   setting the pixel clock to slowly advance the display raster.

1   21.   The method of claim 18, adjusting the pixel clock to maintain a shear-free

2   display of the video window further comprising:

3   determining that the timing relationship between the video window and

4   the capture raster is within a predetermined range; and

5   not adjusting the pixel clock.

1   22.   The method of claim 19, determining that the timing relationship between

2   the video window and the capture raster is above a predetermined threshold further

3   comprising:

4   determining a rate of drift between the capture raster and the display

5   raster.

1   23.   The method of claim 22, determining a rate of drift between the capture

2   raster and the display raster further comprising:

3   sampling a first indicator of the capture raster;

4   sampling a second indicator of the display raster;

5   differencing the first indicator from the second indicator to produce a

6   result; and

7   comparing the result with a previously calculated result to produce a

8   difference of differences.

1   24.   The method of claim 23, further comprising averaging the difference of

2   differences with previously stored difference of differences.

1   25.   The method of claim 18, further comprising:

2   retrieving frequency error information from a table of predetermined

3   phase-locked loop parameters.

1   26.   The method of claim 25, retrieving frequency error information from a

2   table of predetermined phase-locked loop parameters further comprising:

3   retrieving an upper parameter, a middle parameter, and a lower parameter

4   from a group of neighboring phase-locked loop parameters within the table; and

5   designating the middle parameter as a default setting.

1   27.   A method comprising:

2   determining a timing relationship between a video window and a capture

3   raster, wherein the video window is within a display raster;

4   adjusting a pixel clock to avert shear of the video window; and

5   adjusting the pixel clock to maintain a shear-free display of the video

6   window.

1   28.   The method of claim 27, adjusting the pixel clock to avert shear of the

2   video window further comprising:

3   monitoring the timing relationship between the display raster and the

4   capture raster, wherein the monitoring is performed at a first frequency.

1   29.   The method of claim 28, adjusting the pixel clock to maintain a shear-free

2   display of the video window further comprising:

3   monitoring the timing relationship between the display raster and the

4   capture raster, wherein the monitoring is performed at a second frequency.

1   30.   The method of claim 29, further comprising:

2   monitoring the timing relationship between the display raster and the

3   capture raster, wherein the first frequency is greater than the second frequency.

1   31.   An article comprising a medium storing instructions for enabling a system

2 to:

3   calculate a timing relationship between a video window and a capture

4 raster, wherein the video window is within a display raster; and

5   adjust a pixel clock to avert shear of the video window.

1   32.   The article of claim 31, wherein the instructions further enable the system

2 to:

3   determine that the video window is within the timing of the capture raster;

4 and

5   quickly move image shear out of the video window.

1   33.   The article of claim 31, wherein the instructions further enable the system

2 to:

3   determine that the video window is not within the timing of the capture

4 raster; and

5   set the pixel clock to cause the display raster to drift slowly.

1   34.   The article of claim 33, wherein the instructions further enable the system

2 to:

3   set a color burst generator to phase-lock to the display raster.

1   35.   The article of claim 34, wherein the instructions further enable the system

2 to:

3   set the color burst generator to a predetermined nominal setting.

1   36.   The article of claim 31, wherein the instructions further enable the system

2   to:

3   determine that the video window is later than the capture raster; and

4   adjust the pixel clock to quickly retard the display raster.

1   37.   The article of claim 36, wherein the instructions further enable the system

2   to:

3   adjust a color burst generator to maintain a viewable image on the display

4   raster.

1   38.   The article of claim 33, wherein the instructions further enable the system

2   to:

3   determine that the video window is before the capture raster;

4   adjust the pixel clock to quickly advance the display raster; and

5   adjust a color burst generator to maintain a viewable image on the display

6   raster.

1   39.   The article of claim 33, wherein the instructions further enable the system

2   to:

3   determine that the pixel clock is quickly advancing the display raster; and

4   set the pixel clock to slowly advance the display raster.

1   40.   The article of claim 33, wherein the instructions further enable the system

2 to:

3   determine that the pixel clock is quickly retarding the display raster; and

4   set the pixel clock to slowly retard the display raster.

1   41.   An article comprising a medium storing instructions for enabling a system

2 to:

3   determine a timing relationship between a video window and a capture

4 raster, wherein the video window is within a display raster; and

5   adjust a pixel clock to maintain a shear-free display of the video window.

1   42.   The article of claim 41, further storing instructions for enabling a system

2 to:

3   determine that the timing relationship between the video window and the

4 capture raster is above a predetermined threshold; and

5   set the pixel clock to slowly retard the display raster.

1   43.   The article of claim 41, further storing instructions for enabling a system

2 to:

3   determine that the timing relationship between the video window and the

4 capture raster is below a predetermined threshold; and

5   set the pixel clock to slowly advance the display raster.

1   44.   The article of claim 41, further storing instructions for enabling a system
2   to:

3   determine that the timing relationship between the video window and the
4   capture raster is within a predetermined range; and

5   not adjust the pixel clock.

1   45.   The article of claim 42, further storing instructions for enabling a system
2   to:

3   determine a rate of drift between the capture raster and the display raster.

1   46.   The article of claim 45, further storing instructions for enabling a system
2   to:

3   sample a first indicator of the capture raster;
4   sample a second indicator of the display raster;
5   difference the first indicator from the second indicator to produce a result;
6   and

7   compare the result with a previously calculated result to produce a
8   difference of differences.

1   47.   The article of claim 46, further storing instructions for enabling a system
2   to:

3   average the difference of differences with previously stored difference of
4   differences.

1   48.   An article comprising a medium storing instructions for enabling a system

2   to:

3   determine a timing relationship between a video window and a capture

4   raster, wherein the video window is within a display raster;

5   adjust a pixel clock to avert shear of the video window; and

6   adjust the pixel clock to maintain a shear-free display of the video

7   window.

1   49.   The article of claim 48, further storing instructions to enable a system to:

2   monitor the timing relationship between the display raster and the capture

3   raster, wherein the monitoring is performed at a first frequency.

1   50.   The article of claim 49, further storing instructions to enable a system to:

2   monitor the timing relationship between the display raster and the capture

3   raster, wherein the monitoring is performed at a second frequency.

1   51.   The article of claim 50, further storing instructions to enable a system to:

2   monitor the timing relationship between the display raster and the capture

3   raster, wherein the first frequency is greater than the second frequency.